

## SEMICONDUCTOR LIGHT EMITTING DEVICES INCLUDING IN-PLANE LIGHT EMITTING LAYERS

### ABSTRACT OF THE DISCLOSURE

A semiconductor light emitting device includes a planar light emitting layer with a wurtzite crystal structure having a  $\langle 0001 \rangle$  axis roughly parallel to the plane of the layer, referred to as an in-plane light emitting layer. The in-plane light emitting layer may include, for example, a  $\{11\bar{2}0\}$  or  $\{10\bar{1}0\}$  InGaN light emitting layer. In some embodiments, the in-plane light emitting layer has a thickness greater than 50 Å.